Format No: CP/TF/01

# TEST REPORT OF FINE AGGREGATE

**Lab ID** : **CP-2018-01-22-05** **Date: 25-01-18**

**Customer** : Assistant Executive Engineer, Yelahanka Sub division, BBMP, Bangalore.

**Address** : Yelahanka Sub division, BBMP, Bangalore.

**Project Name** : Improvements to roads and drains at Surabhi layout charch road and surrounding areas in Ward no.01 of Yelahanka Sub division.

**Agency** : Sri.B.P. Mahesh, No.58 B.P. Linganna Building, 7th cross, Chandramouleshwara layout, Hunasamaranahalli, Bangalore-562157.

**Customer's Reference** : EE(YNK.D)E-PMT-15/W.O/104/2017-18

**Source of Sample** : Sample supplied by Agency

**Sample Condition** : Satisfactory

**Date of Receipt** : 22-01-18

**Sample ID No** : 2018-01-22-05/03

**Sample Type** : Fine Aggregate

**Reference to BIS codes** : IS 383 : 2016 (Specification for Coarse and fine Aggregates)
IS: 2386 :1963(Part - 1, 3) RA2012
IS 2386 Part 1: Particle Size and Shape
IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption

**Date of test** : 22-01-18

**Total weight taken** : 1000 grams

| Sl.no | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 383:2016 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grading Zone I | Grading Zone II | Grading Zone III | Grading Zone IV |
| 1 | 10 mm | 0 | 0 | 0.0 | 100.0 | 100 | 100 | 100 | 100 |
| 2 | 4.75 mm | 32 | 32 | 3.2 | 96.8 | 90-100 | 90-100 | 90-100 | 95-100 |
| 3 | 2.36 mm | 151 | 183 | 18.3 | 81.7 | 60-95 | 75-100 | 85-100 | 95-100 |
| 4 | 1.18 mm | 198 | 381 | 38.1 | 61.9 | 30-70 | 55-90 | 75-100 | 90-100 |
| 5 | 600 micron | 171 | 552 | 55.2 | 44.8 | 15-34 | 35-59 | 60-79 | 80-100 |
| 6 | 300 micron | 185 | 737 | 73.7 | 26.3 | 5-20 | 8-30 | 12-40 | 15-50 |
| 7 | 150 micron | 177 | 914 | 91.4 | 8.6 | 0-10 | 0-10 | 0-10 | 0-15 |
| 8 | Pan | 86 | 1000 | 100.0 | 0.0 | --- | --- | --- | --- |

**Result :The tested Sample Conforms to Grading Zone II**



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## TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2018-01-22-05** **Date: 25-01-18** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to roads and drains at Surabhi layout charch road and surrounding areas in Ward no.01 of Yelahanka Sub division. |
| **Agency** | : | Sri.B.P. Mahesh, No.58 B.P. Linganna Building, 7th cross, Chandramouleshwara layout, Hunasamaranahalli, Bangalore-562157. |
| **Customer's Reference** | : | EE(YNK.D)E-PMT-15/W.O/104/2017-18 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-01-18 |
| **Sample ID No** | : | 2018-01-22-05/01 |
| **Sample Type** | : | Dalmia 53grade cement |
| **Reference to BIS codes** | : | IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,<br>IS 4031 (Part 1,2 3,4,5, 6,11):1988<br>IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4<br>IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5<br>IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6<br>IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5<br>IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5<br>IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6 |
| **Date of test** | : | 23-01-18 |

| Sl.No. | Physical properties | Results | Requirement as per IS 12269: 2013 |
|---|---|---|---|
| 1 | Fineness by dry sieving (%) | 2.26 | – |
| 2 | Finess by Air permeablity method ($m^2$/kg, Min) | 259.82 | 225$m^2$/kg, Min |
| 3 | Density (gm/cc) | 3.12 | – |
| 4 | Standard Consistency (%) | 28.5% | Not specified |
| 5 | Initial Setting time | 185 minutes | Not less than 30 minutes |
| 6 | Final Setting time | 270 minutes | Not more than 600 minutes |
| 7 | Soundness (Le Chatelier's Method) | 2mm | Not more than 10 mm |

**Note:**

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

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Samples will be disposed after 90 days from the date of issue of test certificate

**FOR CIVIL Pro.**

CIVIL PRO Sig..... Date..... BANGALORE

**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**


****End of Report****

Format No: CP/TF/01

## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2018-01-22-05** **Date: 25-01-18** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to roads and drains at Surabhi layout charch road and surrounding areas in Ward no.01 of Yelahanka Sub division. |
| **Agency** | : | Sri.B.P. Mahesh, No.58 B.P. Linganna Building, 7th cross, Chandramouleshwara layout, Hunasamaranahalli, Bangalore-562157. |
| **Customer Reference** | : | EE(YNK.D)E-PMT-15/W.O/104/2017-18 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-01-18 |
| **Sample ID No** | : | 2018-01-22-05/02(b) |
| **Sample Type/ Size** | : | 20mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 22-01-18 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:**

**Total weight taken : 5000 grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 40 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 20 mm | 235 | 235 | 4.7 | 95.3 | 90-100 |
| 3 | 10 mm | 2738 | 2973 | 59.5 | 40.5 | 25-55 |
| 4 | 4.75 mm | 1859 | 4832 | 96.6 | 3.4 | 0-10 |
| 5 | Pan | 168 | 5000 | 100 | 0 | – |



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## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2018-01-22-05** **Date: 25-01-18** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub division, BBMP, Bangalore. |
| **Project Name** | : | Improvements to roads and drains at Surabhi layout charch road and surrounding areas in Ward no.01 of Yelahanka Sub division. |
| **Agency** | : | Sri.B.P. Mahesh, No.58 B.P. Linganna Building, 7th cross, Chandramouleshwara layout, Hunasamaranahalli, Bangalore-562157. |
| **Customer's Reference** | : | EE(YNK.D)E-PMT-15/W.O/104/2017-18 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample condition** | : | Satisfactory |
| **Date of Receipt** | : | 22-01-18 |
| **Sample ID No** | : | 2018-01-22-05/02(a) |
| **Sample Type** | : | 40mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 22-01-18 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:**

**Total weight taken : 15000 grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 80 mm | 0 | 0 | 0.0 | 100 | 100 |
| 2 | 40 mm | 392 | 392 | 2.6 | 97.4 | 90-100 |
| 3 | 20 mm | 6184 | 6576 | 43.8 | 56.2 | 30-70 |
| 4 | 10 mm | 4620 | 11196 | 74.6 | 25.4 | 10-35 |
| 5 | 4.75 mm | 3274 | 14470 | 96.5 | 3.5 | 0-5 |
| 6 | Pan | 530 | 15000 | 100.0 | 0 | --- |

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